



Patent  
Attorney Docket No. 004501-501

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop: Issue Fee

In re Patent Application of

Klaus Bohnert, et al.

Application No.: 09/754,116

Filing Date: 05 January 2001

Title: TEMPERATURE-COMPENSATED FIBER OPTIC CURRENT SENSOR

Group Art Unit: 2829

Examiner: Vinh P. Nguyen

Confirmation No.: 3279

AMENDMENT/REPLY TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

- ☐ A Petition for Extension of Time is also enclosed.
- ☐ Terminal Disclaimer(s) and the ☐ \$55.00 (2814) ☐ \$110.00 (1814) fee per Disclaimer due under 37 C.F.R. § 1.20(d) are also enclosed.
- ☒ Also enclosed is/are 1) Request to Complete Notice of Allowance, and 2) Comments on Reasons for Allowance
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$385.00 (2801) ☐ \$770.00 (1801) fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.
- ☐ Applicant(s) previously submitted \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- on \_\_\_\_\_,
- for which continued examination is requested.
- ☐ Applicant(s) requests suspension of action by the Office until at least \_\_\_\_\_, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.

- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below.

| AMENDED CLAIMS   |                  |  |              |                    |                |
|--|------------------|--|--------------|--------------------|----------------|
|  | No.<br>of Claims | Highest No. of<br>Claims<br>Previously Paid<br>For | Extra Claims | Rate               | Additional Fee |
| Total Claims   |                  | MINUS =  | 0            | x \$18.00 (1202) = | \$ 0.00        |
| Independent Claims   |                  | MINUS 3 =  | 0            | x \$86.00 (1201) = | \$ 0.00        |
| If Amendment adds multiple dependent claims, add \$290.00 (1203)                                 |                  |  |              |                    |                |
| Total Claim Amendment Fee  |                  |  |              |                    | \$ 0.00        |
| <input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee |                  |  |              |                    | \$ 0.00        |
| <b>TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT</b>   |                  |  |              |                    | <b>\$ 0.00</b> |

- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800.

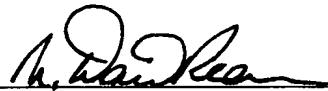
The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

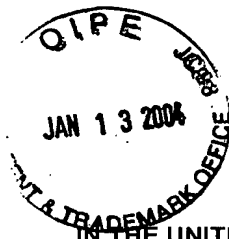
Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: 13 January 2003

By   
M. David Ream  
Registration No. 35,333



Patent  
Attorney Docket No. 004501-501

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Klaus Bohnert, et al.

Application No.: 09/754,116

Filing Date: 05 January 2001

Title: TEMPERATURE-COMPENSATED FIBER OPTIC CURRENT SENSOR

MAIL STOP ISSUE FEE

Group Art Unit: 2829

Examiner: Vinh P. Nguyen

Confirmation No.: 3279

REQUEST TO COMPLETE NOTICE OF ALLOWANCE

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In reviewing the application identified above upon allowance, the undersigned has noted:

- ☒ The Notice of Allowance shows the following discrepancy(ies):

The Statement of Reasons for Allowance on page 2 of the Notice of Allowability mailed with the Notice of Allowance appears to contain some ambiguity. The Examiner is respectfully requested to confirm that each of the independent Claims 21 and 30-31 is independently allowable over the prior art. Please see also the Comments on Reasons for Allowance filed herewith.

The U.S. Patent and Trademark Office is therefore requested to correct this discrepancy and issue a corrected Notice of Allowance.

- ☐ The priority document filed \_\_\_\_\_ has not been acknowledged by the U.S. Patent and Trademark Office. Acknowledgment of this priority document is respectfully requested.
- ☐ The Form PTO-1449 submitted with the Information Disclosure Statement(s) filed on \_\_\_\_\_ has not yet been returned. It is therefore respectfully requested that this form(s) be returned as soon as possible indicating consideration of the document(s) mentioned thereon.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: 13 January 2004

By

M. David Ream

Registration No. 35,333



Patent  
Attorney's Docket No. 004501-501

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

**MS: Issue Fee**

Klaus Bohnert, et al.

Group Art Unit: 2829

Application No.: 09/754,116

Examiner: Vinh P. Nguyen

Filed: 05 January 2001

Confirmation No.: 3279

For: Temperature-Compensated Fiber Optic  
Current Sensor

**COMMENTS ON REASONS FOR ALLOWANCE**

**MS: Issue Fee**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notices of Allowance and Allowability mailed 24 December 2003, Applicants provide the following comments on the Examiner's Statement of Reasons for Allowance found on pages 2-3 of the Notice of Allowability.

Applicants note that there are three independent claims, Claims 21, 30, and 31, each having different language.

In the Statement of Reasons for Allowance, the Examiner indicates that the prior art does not teach Feature A ("select a phase delay... such that the product  $K(T) = \dots$ ) and Feature B ("select the length of the phase delay element...). Feature A is recited in Claim 21, while Feature B is recited in Claim 31. In addition, a third feature, Feature C ("wherein the phase delay of the at least one phase delay element is chosen such that a contribution... ) is recited in independent Claim 30.

Applicants wish to clarify that the prior art fails to disclose each of these features.

Applicants respectfully request the Examiner to indicate agreement and confirm that each of the independent Claims 21 and 30-31 is independently allowable over the prior art.

In particular, the prior art fails to disclose or suggest that the phase delay of the at least one phase delay element is chosen such that the function  $TW(T)$  is such that the

product  $K(T) = TV(T) \cdot TW(T)$  is at least approximately temperature independent, as recited in Claim 21.

The prior art also fails to disclose or suggest that the phase delay of the at least one phase delay element is chosen such that a contribution of the at least one phase delay element to the temperature dependence of the sensitivity of the sensor at least approximately compensates for a contribution of a Verdet's constant of the sensor fiber to the temperature dependence of the sensitivity of the sensor, as recited in Claim 30.

The prior art also fails to disclose or suggest that the length of the at least one phase delay element is chosen such that a contribution of the at least one phase delay element to the temperature dependence of the sensitivity of the sensor at least approximately compensates for a contribution of a Verdet's constant of the sensor fiber to the temperature dependence of the sensitivity of the sensor, as recited in Claim 31.

Applicants respectfully request the Examiner to indicate agreement and confirm that each of the independent Claims is independently allowable over the prior art.

In the event any questions arise regarding this communication or the application in general, please contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: 13 January 2004

By: M. David Ream  
M. David Ream  
Registration No. 35,333

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620